

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-12 are pending in this application. Claims 1, 6, 13, 15, 16-19 and 21 are amended.

Amendments to the Specification

As shown in the preceding section of this Amendment, the specification has been amended to correct minor typographical errors. In particular, the term “affect” has been changed to the term “effect” where appropriate to correct typographical errors. Applicants respectfully submit that no new matter is added by this amendment because it is clear from the context of the sentences including the terms that term “affect” is erroneous and should be replaced with the term “effect”.

Claim Rejections under 35 U.S.C § 103

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Mousley et al. (U.S. Publication No. 2003/0100268, herein Mousley) in view of Zhang et al. (U.S. Patent No. 6,999,432, herein Zhang). Applicants respectfully traverse this rejection for the reasons detailed below.

Amended independent claim 1 recites, *inter alia*, “detecting a state of received ACK/NACK feedback information for associated sent data based on at least one threshold derived using an objective function, the objective function including at least a first term

representing an effect on data throughput for at least one possible type of error in detecting a state of the received ACK/NACK feedback information.”

With respect to the above-quoted feature of independent claim 1 and the similar features of independent claim 13, the Examiner asserts that Mousley “discloses a term representing an effect on data for one possible type of error in detecting a state of the received data ACK/NACK feedback information (page 3 and [0030-0033]).”¹

However, Applicants respectfully submit that the Examiner has not identified this alleged term believed to be within paragraphs [0030-0033] on page 3 of Mousley and thus, Applicants are unclear as to what portion of these paragraphs is believed to disclose a term representing an effect on data for one possible type of error detecting a state of the received ACK/NACK feedback information. Accordingly, Applicants respectfully requests that the Examiner clarify this rejection.

Further, the Examiner acknowledges that Mousley fails to teach an objective function.² Applicants respectfully submit that it is also unclear how Mousley can disclose a term included in an objective function if Mousley fails to disclose the objective function.

The Examiner relies on Zhang (column 20, lines 44-48) as teaching an objective function and alleges “it would have obvious to a person of ordinary skill in the art at the time of the invention to improve upon the communication system, as disclosed by Zhang,” and that doing so “would provide a technique for optimizing a system with several services having different QoS level requirements for multi-media delivery over a wireless network.”

However, column 20, lines 44-48 of Zhang merely states “in order to efficiently add error protection to ELs, the sender determines the degree of protection for each layer adapting to the

¹ Office Action mailed May 23, 2006, page 2, lines 22-24.

² Office Action mailed May 23, 2006, page 3, line 1

current channel condition for achieving the minimal objective function under the required QoS level and resource constraints.” Applicants respectfully submit that while this portion of Zhang describes a minimal objective function, there is no indication in either of the cited references of Mousley or Zhang that the objective function includes “a first term representing an effect on data throughput for at least one possible type of error in detecting a state of the received ACK/NACK feedback information,” as recited in amended independent claim 1.

Therefore, Applicants respectfully submit that even if Mousley and Zhang are combinable, which the Applicants do not admit, the combination of the cited references still fail to disclose, teach or suggest an objective function including “at least a first term representing an effect on data throughput for at least one possible type of error in detecting a state of the received ACK/NACK feedback information,” as recited in amended independent claim 1. Accordingly, Applicants respectfully submit that at least this feature of amended independent claim 1 and the similar feature of amended independent claim 13 are allowable over the cited references of Mousley and Zhang.

Therefore, Applicants respectfully request that the rejection to independent claims 1 and 13 under 35 U.S.C. § 103(a) in view of Mousley and Zhang be withdrawn.

In light of the above, Applicants respectfully submit that claims 2-12 and 14-17, which depend from independent claims 1 and 13, are also allowable over the references of Mousley and Zhang for at least the same reasons as independent claims 1 and 13.

However, Applicants would like to take this opportunity to specifically address some of the dependent claims.

For example, Applicants respectfully submit that dependent claim 3 recites “wherein the first term represents a cost of an average number of total bits to be retransmitted if a NACK is

missed in detection.” With respect to this feature, Applicants respectfully submit that it is unclear how the general abstract of Moulsey and paragraphs [0027-0028] of Moulsey, which describe a flow chart of FIG. 4, discloses a term of an objective function, much less a term that represents a cost of an average number of total bits to be retransmitted if a NACK is missed in detection.”

As a second example, claim 7 indicates that a second term is included in the objective function and that the second term “includes a weight variable representing a cost of correct detection of the state of received ACK/NACK feedback information.” With respect to this feature, page 3, line 15 of the Office Action indicates that page 3, paragraphs [0030]-[0033] of Zhang is believed to disclose a weight variable representing a cost of correct detection of the state of the received ACK/NACK feedback information. However, Applicants respectfully submit that this portion of Zhang fails to disclose, teach or suggest any such weight variable.

The description of the dependent claims above is believed to emphasize that the dependent claims are believed to be allowable over the cited references of Moulsey and Zhang based on their own merits, as well as the merits of independent claim 1 from which these claims depend.

Lastly, Applicants respectfully submit that amended independent claims 18 and 19 include features similar to amended independent claims 1 and 13 and thus, are allowable over the cited references of Moulsey and Zhang for reasons similar to those discussed above with respect to amended independent claims 1 and 13.

In light of the above, Applicants respectfully request that the rejection of claims 1-21 under 35 U.S.C. § 103(a) in view of Moulsey and Zhang be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of the pending claims of the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott A. Elchert at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By



Gary D. Yacura, Reg. No. 35,416

Scott A. Elchert, Reg No. 55,149
P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

GDY/SAE/ame